

What to Study

Biochemistry Unit

Be able to define, understand and explain the functions of, and (when appropriate) give examples of:

- Organic vs inorganic compounds
- Carbohydrates including
 - Monosaccharides
 - Disaccharides
 - Polysaccharides
- Lipids including
 - Fats
 - Triglycerides
 - Phospholipids
 - Steroids
- Proteins including
 - Polypeptides
- Nucleic Acids including
 - DNA
 - RNA
- ATP

Be able to identify:

- The building blocks of
 - Carbohydrates
 - Lipids
 - Proteins
 - Nucleic acids
- The components of
 - Polysaccharides
 - Triglycerides
 - Amino acids
 - Nucleotides
 - ATP

Be able to draw a

- Monosaccharide
- Disaccharide
- Triglyceride molecule

Know how many bonds the following elements typically form

- Carbon
- Oxygen
- Hydrogen
- Nitrogen

Also be able to explain:

- Specifically why water is important for the survival of living organisms
- The difference between the structures and effects of saturated fats, monounsaturated fats, and polyunsaturated fats
- The parts of phospholipids and how they react to water
- Denaturation , how it affects proteins, and what causes it
- The “lock and key” model
- How enzymes work
- Differences between DNA and RNA